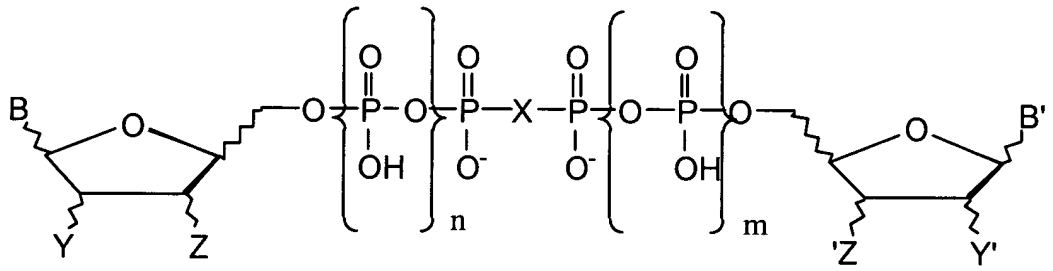
THE AMENDMENT

In the Claims:

1. (Original) A method of treating edematous retinal disorders in a subject in need thereof, said method comprising:

administering to a subject a pharmaceutical composition comprising a dinucleoside polyphosphate compound of Formula I or a pharmaceutically acceptable salt thereof, in an amount effective to stimulate the removal of pathological fluid accumulation in intra-retinal and subretinal spaces associated with edematous retinal disorders;

Formula I



wherein:

X is oxygen, methylene, halomethylene, or imido;

n =0, 1 or 2;

m = 0, 1 or 2;

n +m = 0, l, 2, 3 or 4;

Z =OH or H;

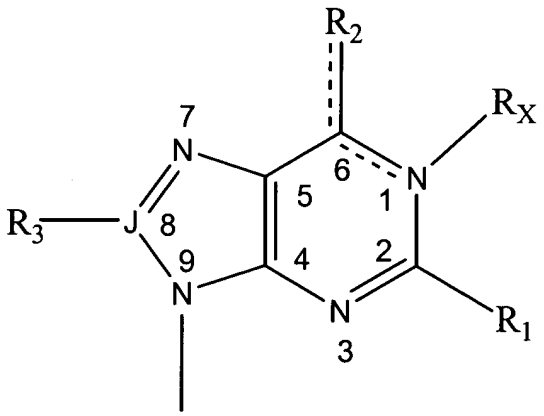
Z'=OH or H;

Y= H, OH, or N_3;

Y'= H, OH, or N_3; and

B and B' are each independently a purine residue or a pyrimidine residue, as defined Formula Ia and Ib, respectively, linked through the 9-or 1-position, respectively:

Formula Ia



R_1 is selected from the group consisting of: hydrogen, fluoro, chloro, bromo, cyano, azido, amino, N-alkylamino, N,N-dialkylamino, N-cycloalkylamino, N-aralkylamino, N-arylamino, N-acylamino, N-alkyl-N-acylamino, N-cycloalkyl-N-acylamino, N-aralkyl-N-acylamino, N-aryl-N-acylamino, alkyloxy, aralkyloxy, aryloxy, alkylthio, arylthio, and aralkylthio; optionally, said N,N-dialkylamino groups are linked to form a heterocycle of 3 to 7 members;

R_2 is hydroxy, alkenyl, oxo, amino, mercapto, thione, alkylthio, arylthio, aralkylthio, acylthio, alkyloxy, aryloxy, aralkyloxy, acyloxy, N-alkylamino, N, N-dialkylamino, N-cycloalkylamino, N-aralkylamino, N-arylamino, N-acylamino, N-alkyl-N-acylamino, N-cycloalkyl-N-acylamino, N-aralkyl-N-acylamino, N-aryl-N-acylamino, or a heterocyclic moiety containing 3 to 10 carbons atoms;

R_X is O, H or is absent;

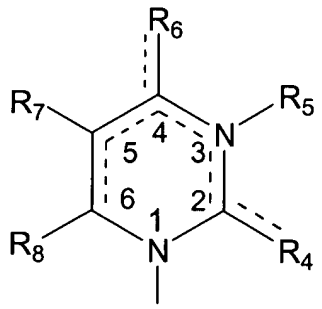
R_2 and R_X are optionally taken together to form a 5-membered fused imidazole ring of a $1,N^6$ -etheno adenine derivative, optionally substituted on one or both of the 4- or 5-positions of the etheno moiety with alkyl, aryl or aralkyl moieties as defined below;

R_3 is selected from the group consisting of hydrogen, fluoro, chloro, bromo, cyano, azido, amino, N-alkylamino, N,N-dialkylamino, N-cycloalkylamino, N-aralkylamino, N-arylamino, N-acylamino, N-alkyl-N-acylamino, N-cycloalkyl-N-acylamino, N-aralkyl-N-acylamino, N-aryl-N-

acylamino, alkyloxy, aralkyloxy, aryloxy, alkylthio, arylthio, and aralkylthio, wherein such a substituent on the nitrogen, oxygen, or sulfur contains up to a maximum of 20 carbon atoms, with or without unsaturation; optionally, said N,N-dialkylamino groups are linked to form a heterocycle of 3 to 7 members; or absent;

J is carbon or nitrogen, with the provision that when J is nitrogen, R_3 is not present;

Formula Ib



wherein:

R_4 is hydroxy, oxo, mercapto, thione, amino, cyano, arylalkoxy, alkylthio, alkoxy, N-alkylamino, N,N-dialkylamino, N-cycloalkylamino, N-aralkylamino, N-arylamino, N-acylamino, N-alkyl-N-acylamino, N-cycloalkyl-N-acylamino, N-aralkyl-N-acylamino, N-aryl-N-acylamino, or a heterocyclic moiety containing 3 to 10 carbons atoms; optionally, said N,N-dialkylamino groups are linked to form a heterocycle of 3 to 7 members;

R_5 is hydrogen, acetyl, benzoyl, alkyl, alkanoyl, aroyl, or absent;

R_6 is hydroxy, oxo, mercapto, thione, amino, cyano, arylalkoxy, alkylthio, alkoxy, aryloxy, N-alkylamino, N,N-dialkylamino, N-cycloalkylamino, N-aralkylamino, N-arylamino, N-acylamino, N-alkyl-N-acylamino, N-cycloalkyl-N-acylamino, N-aralkyl-N-acylamino, N-aryl-N-acylamino, or a heterocyclic moiety containing 3 to 10 carbons atoms; optionally said N,N-dialkylamino groups are linked to form a heterocycle; or

R_5 and R_6 are taken together to form a 5-membered fused imidazole ring between positions 3 and 4 of the pyrimidine ring and form a 3, N^4-ethenocytosine derivative, wherein said etheno moiety is optionally substituted on one or both of the 4-or 5-positions with a moiety selected from the group consisting of: alkyl, aryl, aralkyl, aryloxy, alkyloxy, and aralkoxy;

R_7 is selected from the group consisting of: hydrogen, hydroxy, cyano, nitro, alkyl, aralkyl, alkenyl, aralkenyl, alkynyl, aryl, aralkynyl, halogen, CF_3, allylamino, bromovinyl, ethyl propenoate, propenoic acid and alkyl or aryl esters thereof; or

R_6 and R_7 optionally form a 5 or 6-membered saturated or unsaturated ring bonded through N or O or S at R_6, such ring optionally contains alkyl, aralkyl or aryl substituents;

R_8 is selected from the group consisting of hydrogen, fluoro, chloro, bromo, cyano, azido, amino, carboxy, carbalkoxy, carbobenzyloxy, carboxamido, N-alkylcarboxamido, N-alkylamino, N,N-dialkylamino, N-cycloalkylamino, N-aralkylamino, N-arylamino, N-acylamino, N-alkyl-N-acylamino, N-cycloalkyl-N-acylamino, N-aralkyl-N-acylamino, N-aryl-N-acylamino, alkyloxy, aralkyloxy, aryloxy, alkylthio, arylthio, or aralkylthio, wherein such a substituent on the nitrogen, oxygen, or sulfur contains up to a maximum of 20 carbon atoms, with or without unsaturation; optionally, said N,N-dialkylamino groups are linked to form a heterocycle of 3 to 7 members;

wherein the alkyls, alkenyls, and alkynyls are straight-chain, branched or cyclic; substituted or unsubstituted;

provided said dinucleoside polyphosphate compound is not P^1-(cytidine 5'-)P^4-(uridine 5'-)tetraphosphate, or an ester or an amide or a salt thereof.

2. (Original) The method according to Claim 1, wherein said edematous retinal disorders are retinal detachment or retinal edema.

3. (Original) The method according to Claim 1, wherein said edematous retinal disorders are selected from the group consisting of: diabetic macular edema, age-related macular degeneration, central serous retinopathy, and macular edema.

4. (Original) The method according to Claim 3, wherein said macular edema arises from uveitis, central and branch vein occlusion, retinitis pigmentosa, central serous retinopathy, CMV retinitis, cystoid macular edema, or choroidal melanoma.

5. (Original) The method according to Claim 1, wherein the furanosyl moiety of Formula I is a ribosyl or deoxyribosyl moiety.

6. (Original) The method according to Claim 1, wherein said furanosyl moiety is selected from the group consisting of: arabinofuranosyl, 2'-deoxyribofuranosyl, 3'-deoxyfuranosyl, xylofuranosyl, and lyxofuranosyl.

7. (Original) The method according to Claim 1, wherein said administering is intravitreal, systemic or topical administration of said compound.

8. (Original) The method according to Claim 7, wherein said intravitreal administration of the compound is by injection into the vitreous or bolus, by sustained infusion into the vitreous, by sustained release into the vitreal cavity, by retrobulbar conjunctival injection, release, or infusion, by transcleral injection, by sustained transcleral release or infusion, by ocular surface instillation, or by acute or chronic injection or infusions.

9. (Original) The method according to Claim 8, wherein said intravitreal administration of the compound is by administering an amount of between about 0.10 milligrams and about 4.0 milligrams of said compound per eye; wherein said pharmaceutically acceptable salt is selected from the group consisting of: sodium, potassium, lithium and ammonium salt of said dinucleoside polyphosphate compound of Formula I, and said pharmaceutical composition has an osmolarity between about 250 and 350 mOsm, and pH between about 5.0 and 9.0.

10. (Original) The method according to Claim 9, wherein pharmaceutical composition has an osmolarity between about 280 and 300 mOsm, and pH between about 7.0 and 7.6.

11. (Original) The method according to Claim 8, wherein said intravitreal administration of the compound is by single or multiple intravitreal injections at injection volumes of 1-200 microliter.

12. (Original) The method according to Claim 8, wherein said intravitreal administration of the compound is by single or multiple intravitreal injections at injection volumes of 50-100 microliter.

13. (Original) The method according to Claim 7, wherein said topical administration of said compound is via a carrier vehicle selected from the group consisting of: drops of liquid, liquid wash, gels, ointments, sprays and liposomes.

14. (Original) The method according to Claim 7, wherein said topical administration comprises infusion of said compound to said ocular surface via a device selected from the group consisting of: a pump-catheter system, a continuous or selective release device, and a contact lens.

15. (Original) The method according to Claim 1, wherein said pharmaceutical composition is co-administered with a primary treatment or adjunctive agents used to manage edematous retinal disorders.

16. (Original) The method according to Claim 15, wherein said primary treatment is selected from the group consisting of: surgery, grid and focal laser photocoagulation, and pharmacotherapy.

17. (Original) The method according to Claim 16, wherein said surgery is selected from the group consisting of: scleral buckling, pneumatic retinopexy, vitrectomy, and macular translocation; and said pharmacotherapy is administration of one or more pharmacotherapic agents selected from the group consisting of: corticosteroids, carbonic anhydrase inhibitors, anti-inflammatory agents, and pharmaceuticals that promote digestion of collagen and fibrous tissues that connect vitreous and retina.

18. (Original) The method according to Claim 1, wherein said pharmaceutical composition is a sterile preparation comprising a pharmaceutically acceptable carrier.

19. (Original) The method according to Claim 1, wherein said pharmaceutical composition is prepared in a formulation selected from the group consisting of: aqueous, gel, gel-like, and solid formulation.

20. (Original) A method of treating edematous retinal disorders in a subject in need thereof, said method comprising:

administering to said subject a pharmaceutical composition comprising a mononucleoside triphosphate or a pharmaceutically acceptable salt thereof, in an amount effective to stimulate the removal of pathological fluid accumulation in intra-retinal and subretinal spaces associated with edematous retinal disorders, wherein said mononucleoside triphosphate is selected from the group consisting of: 5'-UTPγS, 5'-CTPγS, 5'-TTPγS, 5'-GTPγS, 5'-CP_2NHP, 5'-TP_2NHP, 5'-UP_2NHP, 5'-GP_2NHP, 5'-AP_2NHP, 5'-ATPγS, α,β–methylene 5'-ATP, β,γ–methylene 5'-ATP, 5'-ATPαS, β,γ–difluoromethylene 5'-UTP, β,γ–methylene 5'-UTP, and β,γ–dichloromethylene 5'-UTP.

21. (Original) A method of treating edematous retinal disorders in a subject in need thereof, said method comprising:

administering to a subject a pharmaceutical composition comprising P^1-(cytidine 5')-P^4-(uridine 5'-)tetraphosphate, an ester, an amide, or a pharmaceutically acceptable salt thereof, in an amount effective to stimulate the removal of pathological fluid accumulation in intra-retinal and subretinal spaces associated with edematous retinal disorders, wherein said pharmaceutical composition is co-administered with a primary treatment used to manage edematous retinal selected from the group consisting of: surgery, grid and focal laser photocoagulation, and pharmacotherapy.

22. (New) The method according to Claim 1, wherein said pharmaceutical composition comprises P^1-(2'-deoxycytidine 5'-)P^4-(uridine 5'-)tetraphosphate or a pharmaceutical acceptable salt thereof.

23. (New) The method according to Claim 1, wherein said pharmaceutical composition comprises P^1-(2'-deoxycytidine 5'-)P^4-(uridine 5'-)tetraphosphate, tetrasodium salt.

24. (New) The method according to Claim 1, wherein said pharmaceutical composition comprises P^1-(2'-deoxycytidine 5'-)P^4-(uridine 5'-)tetraphosphate, tetralithium salt or tetrapotassium salt.